

Management System: [Project Management](#)

Subject Area: [Critical Decision \(CD\) Management](#)

Critical Decision 1, Approve Alternate Selection and Cost Range

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1.0 Applicability

This procedure applies to all Program Office staff and Federal Project Directors seeking to begin conceptual design work on a project.

2.0 Required Procedure

Upon approval of the Mission Need Statement and CD-0 (refer to [Process 1](#)), the project enters the Definition Phase, where alternative concepts based on user requirements, risks, costs, and other constraints are analyzed to arrive at a recommended alternative. During this phase, more detailed planning is accomplished, which further defines the required capability.

At the conclusion of the Definition Phase, the alternative selected as the best solution to the mission need is presented for approval. The recommended alternative, when sufficiently defined and analyzed, is presented to the Secretarial Acquisition Executive (or designated Acquisition Executive) for review and approval (CD-1, Approve Alternative Selection and Cost Range). Approval of CD-1 provides the authorization to begin the project Execution Phase and allows Project Engineering and Design (PED) funds to be used.

NOTE: For the majority of projects, once selected (often immediately after CD-0), the site office and Federal Project Director assume the primary responsibility for execution of the project.

Requirements related to obtaining CD-1 are as follows:

Step	Requirement
Step 1	Determine the Critical Decision 1 Approving Official. Refer to the EMCBC Site Authority Matrix .
Step 2	Review the Acquisition Advisory Board (AAB) procedure up to the level needed: EM CBCAAB , EM HQ EMAAB , or OECM ESAAB .

Step	Requirement
	Review the ESAAB Timeline for obtaining CD-1 (refer to Attachment 2 of the ESAAB Procedures)
Step 3	<p>The Federal Project Director, in cooperation with the Program Office, completes the following prerequisites (see page A-6, Table 2.1 of DOE O 413.3B) for obtaining CD-1 Approval:</p> <ul style="list-style-type: none"> • Conceptual Design Report (refer to the Project Definition Phase), including as needed, a Value Management Assessment, and Conceptual Design Review • Develop a Risk Management Plan • Preliminary Project Execution Plan • Acquisition Strategy • Facility Safety documents (Preliminary Hazard Analysis Report or Conceptual Safety Design Report (CSDR) with Conceptual Safety Validation Report (CSVR)). <p>See DOE G 413.3-9 Project Review Guide for Capital Asset Projects for project review requirements at this CD.</p>
Step 4a <i>Major Systems Projects</i>	<p>Obtain Approval of the Acquisition Strategy:</p> <ol style="list-style-type: none"> a. The Federal Project Director, in coordination with the Program Office, develops the project's Acquisition Strategy. EM-1 will approve the Acquisition Strategy. This cannot be delegated. <ol style="list-style-type: none"> i. Approximately one month prior to the anticipated CD-1 ESAAB meeting, the Program Office Associate Director submits the Acquisition Strategy (in Microsoft Word format) via e-mail. ii. Send a copy of the Acquisition Strategy to the EM Office of Project Management (EM-53). b. Resolve any comments received from the OECM. The following individuals should be included in the distribution of the Acquisition Strategy submission: <ul style="list-style-type: none"> ○ Deputy Assistant Secretary, Acquisition and Project Management (EM-50) ○ Program Manager ○ Federal Project Director ○ All others deemed appropriate by the Program Office

Step	Requirement
	<ul style="list-style-type: none"> c. The Program Office Associate Director forwards the Acquisition Strategy, via action memorandum, to the Director of EM for approval. The Director of EM may sign the Acquisition Strategy after reviewing the OECM recommendation memorandum. d. Obtain the following concurrence signatures for the Acquisition Strategy: <ul style="list-style-type: none"> o DOE Contracting Officer o Federal Project Director o Site Office Manager o Program Manager o Program Associate Director o DAS for Acquisition and Project Management (EM-50) o Director, OECM
Step 4b <i>Non-Major Systems Projects</i>	<p>Obtain Approval of the Acquisition Strategy:</p> <ul style="list-style-type: none"> a. The Federal Project Director, in coordination with the Program Office, develops the project's Acquisition Strategy document. b. Approximately three weeks prior to the anticipated CD-1 EMAAB or CBCAAB (depends on delegated authority level) Meeting, submit the Acquisition Strategy via e-mail for review by the Board. <p>NOTE: When the Acquisition Strategy is submitted, indicate the Program Manager or a point-of-contact for the Acquisition Strategy.</p> <ul style="list-style-type: none"> c. Resolve any comments received from the Board. d. Submit a revised hard copy of the Acquisition Strategy to Board for concurrence by the Acquisition Executive. The Acquisition Strategy may then continue through the concurrence/approval chain. e. Obtain the following concurrence signatures for the Acquisition Strategy: <ul style="list-style-type: none"> o DOE Contracting Officer o Federal Project Director o Site Office Manager o Program Manager o Director, EMCBC or Acquisition Executive
Step 5	Conduct Conceptual Design Review.

Step	Requirement
	<p>Projects requiring complex design work will have a formal Conceptual Design Report, and usually an independent Conceptual Design Review. This is often conducted by the Office of Project Management; however, the Program Office may conduct the review independently.</p> <ol style="list-style-type: none"> The Program Office establishes a review date with and issues a charge memorandum to the Office of Project Management approximately eight weeks prior to the anticipated review date. The Office of Project Management, in coordination with the Program Manager and Federal Project Director, develops a review agenda and assembles a review committee. The review is conducted, and findings, comments, and recommendations are shared with the Program Office, Federal Project Director, and Laboratory Management and Contractors at a closeout briefing at the conclusion of the review. The Federal Project Director then ensures that all findings and recommendations resulting from the review are appropriately addressed within the recommended timeframe. The final review report is provided to the Program Office within 60 days of the review.
Step 6	<p>Execute the ESAAB CD-1 Approval Process.</p> <p>Refer to Steps 7 - 9 for Major Systems Projects CD Approval Process. Refer to Steps 10 - 12 for Non-Major Systems Projects CD Approval Process.</p>
Step 7 <i>Major Systems Projects</i>	<p>Prepare for the Pre-ESAAB Meeting.</p> <ol style="list-style-type: none"> When the Acquisition Strategy is approved and the other CD-1 prerequisites (Step 3) are completed, the Program Office requests that the Office Project Management (EM-10) schedule a Pre-ESAAB meeting with OECM. <p>NOTE: The Pre-ESAAB serves as a dry-run of the Secretarial Acquisition Executive ESAAB meeting with the Deputy Secretary of Energy. The purpose of the Pre-ESAAB is to resolve comments and issues prior to the formal ESAAB meeting.</p> <ol style="list-style-type: none"> The Federal Project Director and Program Manager prepare a draft presentation and submit it to the Office Project Management (EM-10) one week prior to the Pre-ESAAB for dissemination to the Pre-ESAAB

Step	Requirement
	<p>members. The Pre-ESAAB briefing is usually presented by the Program Associate Director, Program Manager, or Federal Project Director.</p>
<p>Step 8 <i>Major Systems Projects</i></p>	<p>Brief Senior Management:</p> <p>In parallel with scheduling a Pre-ESAAB meeting, the Program Office schedules a meeting with the Under Secretary and/or the Director/Principal Deputy Director, and Office Project Management (EM-10).</p> <p>NOTE: The purpose of this meeting is to brief senior-level management on the project's request for CD-1 and to determine the manager (the Under Secretary, Director/Principal Deputy Director, Program Associate Director, or Federal Project Director) who will make the presentation at the Secretarial Acquisition Executive ESAAB meeting. The Program Office tries to schedule this briefing several days prior to the Pre-ESAAB meeting as a courtesy to senior management and to receive senior management's perspective/comments on the draft presentation.</p>
<p>Step 9 <i>Major Systems Projects</i></p>	<p>Obtain Secretarial Acquisition Executive ESAAB Review/Approval of CD-1. After briefing Senior Management and completing the Pre-ESAAB meeting:</p> <ol style="list-style-type: none"> a. The Program Office works with the Pre-ESAAB board members to resolve issues and answer inquiries prior to the Secretarial Acquisition Executive ESAAB meeting. b. When inquiries and issues are resolved to the extent possible and the briefing is finalized, the Program Associate Director forwards the finalized presentation via email to the ESAAB Secretariat and requests the Secretarial Acquisition Executive ESAAB meeting for CD-1 be scheduled. Include the following individuals in the distribution: <ul style="list-style-type: none"> ○ Deputy Assistant Secretary, Project Management (EM-10) ○ Program Manager ○ Federal Project Director ○ All others deemed appropriate by the Program Office c. The OECM confirms the Program's readiness to continue with the Secretarial Acquisition Executive ESAAB meeting. d. The ESAAB Secretariat contacts the Program Office with the Secretarial Acquisition Executive's next available meeting date, which is normally within two-to-three weeks of the request. e. Prior to the ESAAB meeting, the Program Office will: <ul style="list-style-type: none"> ○ Determine who will make the CD-1 presentation at the ESAAB

Step	Requirement
	<p>meeting (the presentation is usually given by either the Under Secretary, the Director/Principal Director, or in some cases the Program Office Associate Director).</p> <ul style="list-style-type: none"> ○ Determine the individuals who will participate in the Secretarial Acquisition Executive ESAAB meeting (usually limited to five seats). ○ Advise the Office of Project Management of the date of the ESAAB meeting. ○ Provide OECM with 20 color copies and 10 black and white copies of the final presentation at least one-half hour prior to the ESAAB meeting. ○ Provide a laptop computer (for use with the LCD projector) and electronic copy of the current presentation at the ESAAB meeting. <p>f. After the Secretarial Acquisition Executive ESAAB meeting, the Program Office iterates a draft of the approval memorandum with OECM.</p> <p>NOTE: The Program Office will receive the final approval memorandum from the Deputy Secretary of Energy within approximately two weeks after the meeting.</p>
Step 10 <i>Non-Major Systems Projects</i>	<p>When the Acquisition Strategy is approved and the other CD-1 prerequisites are completed, the Program Office requests that an EMAAB meeting (or CBCAAB meeting depending on delegated authority) for CD-1 be scheduled.</p> <p>NOTE: The request should be placed at least two weeks prior to the anticipated Board meeting date.</p>
Step 11 <i>Non-Major Systems Projects</i>	<p>The Federal Project Director, in cooperation with the Program Manager, prepares a briefing package and a CD-1 approval document for use at the EMAAB (or CBCAAB) meeting. The review documents should be forwarded to the Board Secretariat at least one week prior to the scheduled Board meeting.</p> <p>NOTE: EMAAB (or CBCAAB) members have one week to review the documents and to provide preliminary comments or issues to the Program Office.</p>
Step 12 <i>Non-Major Systems Projects</i>	<p>Conduct EMAAB (or CBCAAB) Meeting.</p> <ul style="list-style-type: none"> • The Federal Project Director presents the CD-1 request for approval to the Board. • The Board has the opportunity to ask questions, raise concerns, and make a recommendation for approval to the Acquisition Executive. • Based on these recommendations, the Acquisition Executive either

Step	Requirement
	<p>approves the CD-1 request or defers approval until questions and/or issues are resolved.</p> <ul style="list-style-type: none"> The Board Secretariat prepares and distributes minutes of the meeting.

3.0 References

- [DOE O 413.3B](#), *Program and Project Management for the Acquisition of Capital Assets*
- [DOE G 413.3-7A](#), *Risk Management Guide*
- [DOE G 413.3-9](#), *U.S. Department of Energy Project Review Guide for Capital Asset Projects*,
- [DOE G 413.3-12](#), *U.S. Department of Energy Project Definition Rating Index Guide for Traditional Nuclear and Non-Nuclear Construction Projects*,
- [DOE G 413.3-13](#), *U.S. Department of Energy Acquisition Strategy Guide for Capital Assets Projects*
- [DOE G 413.3-15](#), *Department of Energy Guide for Project Execution Plans*
- DOE EM Project Definition Rating Index ([EM-PDRI](#))
- DOE [EM SOPP #26](#), *External Technical Reviews for the Environmental Management (EM) Program*, 04/01/08
- DOE [EM SOPP #41](#) Rev. 1, *Capital Asset Project Critical Decision Approval Process*, 04/01/11
- [OECM SOP 413.3-1](#), *Energy System Acquisition Advisory Board (ESAAB)*, 09/22/04
- CBC [IP-413.3B](#), Rev. 2, *Consolidated Business Center Acquisition Advisory Board (CBCAAB)*, 05/26/11
- [Process 1, Critical Decision 0, Approve Mission Need](#)
- [Process 7, Project Definition Phase](#)
- [Project Delivery Subject Area](#)
- [Delegation of Acquisition Executive Authority for Capital Asset Projects at Small Sites](#), I. Triay/EM-1 to J. Craig/EMCBC, 02/25/11
- [Retract Delegation of Acquisition Executive Authority for Capital Asset Projects at the Nevada National Security Site and Los Alamos National Laboratory](#), David Huizeiga/Senior Advisor for Environmental Management to J. Craig/EMCBC, 7/16/12
- [EMCBC Site Authority Matrix](#), Rev. 1
- [Approved PEP Example](#) (Cañon de Valle, VL-LANL-0030, SEP11)